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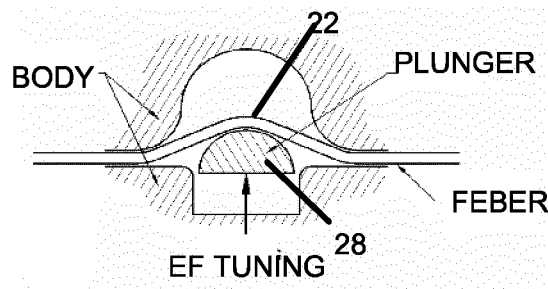
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(54) **Optical light source with controlled launch conditions**

(57) A system, apparatus and method for providing controlled launch conditions to an optical light source comprises adjustable fiber bending/deforming apparatus to allow adjustment of the device such that multimode

launch conditions can be accurately controlled. Both LED light source and OTDR/laser implementations are provided.

**FIG. 5**



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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 940 891 A (RAST HOWARD E [US]) 10 July 1990 (1990-07-10) * abstract * * column 1 - column 7 * * figures 1-3 *	1-5, 10-14	INV. G01M11/08
X	----- US 5 016 476 A (PETERSON STANLEY P D [US] ET AL) 21 May 1991 (1991-05-21) * abstract * * column 1 - column 7 * * figures 1-15 *	1,10	
X	----- US 5 039 218 A (CHESLER RONALD B [US] ET AL) 13 August 1991 (1991-08-13) * abstract * * column 1 - column 7 * * figures 1-7 *	1,10	
X	----- US 4 714 343 A (IDE TAKASHI [JP]) 22 December 1987 (1987-12-22) * abstract * * column 1 - column 16 * * figures 1-10 *	1,10	TECHNICAL FIELDS SEARCHED (IPC) G01M
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-The present search report has been drawn up for all claims			
Place of search <b>The Hague</b>		Date of completion of the search <b>31 January 2017</b>	Examiner <b>Ridha, Philipp</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/02 (P04/C01)



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**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing claims for which payment was due.

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Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

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No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

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**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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see sheet B

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All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

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As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

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Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

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None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

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1-5, 10-14

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The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION  
SHEET B**

Application Number  
EP 13 16 6768

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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1. claims: 1-5, 10-14

Claim directed to an apparatus for controlling launch conditions for fiber optic testing.

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2. claims: 6-9

Claim directed to a fiber optic modal conditioner.

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ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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